

REMARKS

Claims 1 – 16 and 28, 29, and 34, 37– 44 are pending.

Claims 17 – 22, 30 – 33, 35 and 36 were cancelled by Applicants in favor of a continuation / divisional application.

In the Office Action of January 10, 2007, the Examiner rejected claims 1 - 16, 29(23), 29(24), 36, 39 - 44 under 35 U.S.C. §112, second paragraph. Applicants amended the above claims to overcome these rejections.

In the Office Action of January 10, 2007, the Examiner rejected claims 1, 3, 13(1), 14(1), 15(1) and 16(1) under 35 U.S.C. §102(b) anticipated by U.S. Patent No. 5,244,179 to Wilson. Applicants respectfully disagree with these rejections.

Claim 1 is directed to an automatic toilet room flush valve including a valve body including an inlet and an outlet, a valve seat inside the body, and a valve member cooperatively arranged with the valve seat, wherein the valve member is constructed and arranged to control water flow between the inlet and the outlet, and wherein the movement of the valve member between the open and closed positions is controlled by water pressure inside a pilot chamber. The flush valve also includes an external cover designed for enclosing an electronic control module comprising a battery, and a sensor, and the external cover also enclosing an actuator for controlling operation of the flush valve. The flush valve also includes a plastic housing located inside the external cover constructed to enclose the electronic control module, the battery and the sensor in a sealed arrangement, wherein the external cover including at least two removable cover parts, the external cover being attachable and removable with respect to the valve body, and wherein the external cover is attached to the valve body in a manner also attaching the plastic housing including the control module with respect to the valve body.

Wilson does not disclose any such flusher including an external flusher cover and a separate plastic housing located inside the external cover constructed to enclose an electronic control module.

The Examiner also rejected claims 2, 4, 5, 8, 13(2), 14(2), 15(2) and 16(2) under 35 U.S.C. §102(b) anticipated by U.S. Patent No. 5,125,621 to Parsons. Applicants respectfully disagree with these rejections.

Specifically, claim 2 is directed to an automatic toilet room flush valve including a valve body including an inlet and an outlet and a valve seat inside the body, and a valve member cooperatively arranged with the valve seat, wherein the valve member is constructed and arranged to control water flow between the inlet and the outlet, and wherein the movement of the valve member between open and closed positions is controlled by water pressure inside a pilot chamber. The flush valve also includes an external cover designed for enclosing an electronic control module comprising a battery, and a sensor and designed for enclosing an actuator for controlling operation of the flush valve. The external cover includes at least a main cover body and a top cover removable with respect to the main cover body, wherein the external cover is attachable with respect to the valve body in a manner also attaching the control module with respect to the valve body. The top cover includes a button constructed for manually triggering a flush cycle of the valve member, wherein the button is attached to and removable with the top cover without removal of the electronic control module, and wherein both the main cover body and the top cover of the external cover are removable to enable separate servicing and replacement of the control module while maintaining the water pressure in the pilot chamber.

Parsons does not disclose any such flush valve.

The Examiner also rejected independent claims 10 and 23 under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 5,125,621 to Parsons in view of U.S. Patent 1,518,942 to Spear. Applicants respectfully disagree with this rejection.

Claim 10 is directed to an automatic toilet room flush valve including a valve body including an inlet and an outlet, a valve seat inside the body, and a valve member cooperatively arranged with the valve seat, wherein the valve member is constructed and arranged to control water flow between the inlet and the outlet, and wherein the movement of the valve member between the open and closed positions is controlled by

water pressure inside a pilot chamber. The flush valve also includes an external cover designed for enclosing an electronic control module and an actuator. The electronic control module includes a battery, and a sensor for controlling operation of the flush valve. The external cover included at least a main cover body and a top cover removable with respect to the main cover body, and the external cover is attachable with respect to the valve body in a manner also attaching the control module. Importantly, both the main cover body and the top cover of the external cover are removable to enable servicing and replacement of the control module while maintaining the water pressure in the pilot chamber. The main cover body, the front cover, and the top cover are constructed to include attachment surfaces enabling attachment by at least one screw to a pilot cap defining the pilot chamber and being attached to the valve body.

Parsons in combination with Spear do not disclose such flush valve. There is no teaching that both the main cover body and the top cover of the external cover could be removable to enable servicing and replacement of the control module while maintaining the water pressure in the pilot chamber or that the screw can be attachable to the pilot cap.

Claim 23 is directed to an automatic toilet flush valve including a body having an inlet and an outlet, and a valve assembly in the body constructed and arranged to open and close water flow from the inlet to the outlet upon actuation signals provided by an electronic system to an actuator. The automatic flush valve includes a pilot cap defining a pilot chamber in communication with the outlet via a relief passage controlled by the actuator receiving drive signals from the electronic system. The automatic flush valve also includes a cover, mounted above the pilot cap, constructed to provide housing for the electronic system, wherein the cover is removable while maintaining water pressure inside the pilot cap and enabling replacement of the electronic system while maintaining the water pressure inside the pilot cap. The cover includes at least two parts being held together using at least one screw attachable to the pilot cap wherein the cover is

removable without displacing said electronic system.

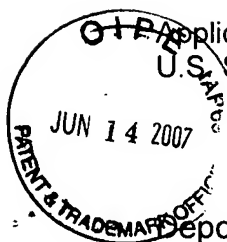
Parsons in combination with Spear do not disclose such flush valve.

The Examiner also rejected independent claim 24 under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 5,125,621 in view of U.S. Patent 5,281,808 to Kunkel. Applicants respectfully disagree with this rejection.

Claim 24 is directed to an automatic toilet flush valve including a body having an inlet and an outlet, and a valve assembly in the body constructed and arranged to open and close water flow from the inlet to the outlet upon actuation signals provided by an electronic system to an actuator. The automatic flush valve includes a pilot cap defining a pilot chamber in communication with the outlet via a relief passage controlled by the actuator. The automatic flush valve also includes a sensor, included in the electronic system, constructed to detect a user located in front of the flush valve and designed to provide control signals to the electronic system, the electronic system being constructed to provide drive signals to the actuator. The automatic flush valve also includes a cover mounted above the pilot cap and constructed to provide housing for the electronic system, wherein the cover is designed cooperatively with the electronic system to enable sensitivity adjustment of the sensor without complete removal of the cover.

Parsons in combination with Spear do not disclose such flush valve. Parsons does not disclose any sensitivity adjustment, and Kunkel does not even hint about any cover that would enable the sensitivity adjustment.

Accordingly, all pending claims 1 – 16 and 28, 29, and 34, 37– 44 are in condition for allowance.



The Commissioner is authorized to charge PTO fees from the undersigned's Deposit Account 502-196.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ivan D. Zitkovsky".

Ivan D. Zitkovsky, Reg. No. 37,482
5 Militia Drive
Lexington, MA 02421

Tel. +781-274-6690
Fax +781-274-6696

**CERTIFICATE OF MAILING
UNDER 37 C.F.R. §1.8(a)**

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

June 11, 2007

Ivan D. Zitkovsky